BEFORE THE
SOUTH CAROLINA PUBLIC SERVICE COMMISSION
DOCKET NO. 2004-6-G

ANNUAL REVIEW OF THE PURCHASED	**)**
GAS ADJUSTMENTS (PGA) AND GAS	**)**
PURCHASING POLICIES OF	**)**
SOUTH CAROLINA PIPELINE	**)**
CORPORATION	**)**

DIRECT TESTIMONY AND EXHIBIT
OF
GLENN A. WATKINS

ON BEHALF OF THE
SOUTH CAROLINA CONSUMER ADVOCATE

May 14, 2004

Technical Associates, Inc.

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Glenn A. Watkins. My business address is James Center III, Suite 601, 1051 East Cary Street, Richmond, Virginia 23219.

Q. WHAT IS YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND?

A. I am Vice President and Senior Economist of Technical Associates, Inc., which is a business research and consulting firm with offices in Richmond, Virginia. Except during 1987 when employed by Old Dominion Electric Cooperative as its forecasting and rate economist, I have worked in varying capacities with Technical Associates continuously since 1980.

During my career at Technical Associates, I have conducted cost of capital, revenue requirement, load forecasting, cost of service, and rate design studies involving numerous electric, gas, water/wastewater, and telephone utilities, as well as presented expert testimony in Alabama, Arizona, Georgia, Maine, Maryland, Michigan, New Jersey, Illinois, Pennsylvania, Vermont, Virginia, South Carolina, and West Virginia in connection with these studies.

I hold an M.B.A. and B.S. in economics from Virginia Commonwealth University and have been qualified as a Certified Rate of Return Analyst. A more complete statement of my professional and educational background appears in the appendix to my testimony.

Q. HAVE YOU PREVIOUSLY APPEARED BEFORE THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION?

A. Yes, I have provided expert testimony in the last two general rate cases of Piedmont Natural Gas Company, Inc. (1995 and 2002), and SCE&G's last general electric rate case (2002).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. TAI has been retained by the South Carolina Department of Consumer Affairs ("Consumer Advocate") to study and investigate the cost of purchased gas that South Carolina Pipeline Corporation ("SCPC") passes on to its various customers. Specifically, TAI was asked to study and investigate the details underlying SCPC's Industrial Sales Program Rider ("ISPR") to determine if the ISPR: (a) provides undue cross subsidies across customers or groups of customers; (b) unfairly protects pipeline's profits at the expense of captive ratepayers; (c) is arbitrary and capricious in theory and practice; (d) comports with economic efficiency and sound ratemaking; and (e) is in the Public Interest.

Q. PLEASE BRIEFLY DESCRIBE THE OPERATONS OF SCPC.

A. SCPC is referred to as a natural gas pipeline company and not a local distribution company ("LDC") such as Piedmont Natural Gas or South Carolina Electric and Gas.[1/] However, in addition to operating as a gas transmission pipeline, SCPC also operates similar to an LDC in that it serves several industrial end users (retail customers). Moreover, unlike interstate pipelines which provide only transportation services for their customers, SCPC provides a merchant function in that it purchases and resells gas to its customers (resale and retail).

[1/] LDC's typically provide retail natural gas services to retail end-users (i.e., residential commercial and industrial customers). These services include the purchase and resale of gas, as well as transportation services for retail customers that purchase their own gas.

Q. PLEASE EXPLAIN THE GENERAL FRAMEWORK AND RATIONALE UNDERLYING THE ISPR.

A. In 1983, SCPC proposed an experimental ISPR citing concerns of potential industrial sales losses due to competition from alternative fuels. The ISPR was designed to allow pricing flexibility to interruptible industrial sales customers so that SCPC could maintain and/or attract new gas load. SCPC claimed that this preservation and/or attraction of new industrial sales volumes would benefit all ratepayers because SCPC's fixed costs (base rate costs) could be spread across a larger volume of units, thereby reducing the base rates paid by all customers.

Q. HOW IS THE COST OF GAS FOR THE ISPR DETERMINED?

A. Each month, SCPC assigns the first 20,000 Dth per day of purchased gas to firm cusotmers. Once this cheapest 20,000 Dth per day is reserved for firm customers, ISPR is then assigned the cheapest commodity cost of gas ("COG") purchased by SCPC during the month. The remaining (highest price gas) is then assigned to Firm sales.

Q. DOES THE CHEAPEST 20,000 DTH PER DAY OF GAS REPRESENT A SUBSTANTIAL AMOUNT OF GAS RELATIVE TO THE TOTAL GAS PURCHASED BY SCPC?

A. No. During 2003, SCPC purchased an average level of 5,691,892 Dth per month. 20,000 Dth pre day represents about 10% of this amount. As I will describe later in my testimony, firm customers should correctly be assigned all of the cheapest gas purchased by SCPC.

Q. HAS THE STRUCTURE OF THE UNITED STATES NATURAL GAS INDUSTRY CHANGED SIGNIFICANTLY SINCE THE IMPLEMENTATION OF THE ISPR IN 1983?

A. Yes. The structure of natural gas industry today is much different today than it was in the early 1980's.

Q. PLEASE PROVIDE A BRIEF HISTORY OF THE NATURAL GAS INDUSTRY IN THE UNITED STATES AND COMMENT ON HOW THESE CHANGES RELATE TO THE ISPR.

A. From the advent of the natural gas industry until the late 1980's to early 1990's, natural gas pipelines acted as the sole suppliers of gas to LDC's. That is, pipelines purchased gas at the wellhead, transported this gas to an LDC's city gate and sold this bundled service to the LDC. This bundled service is typically referred to as a merchant function (purchase and resale of gas) and a transportation function (transporting the gas product to customers).

From 1954 through 1978, natural gas wellhead prices were strictly regulated by the Federal Power Commission (later becoming the Federal Energy Regulatory Commission). As a result of strict wellhead price controls and escalating oil prices, the natural gas industry experienced severe supply shortages by the mid 1970's. In 1978, the U.S. Congress passed the Natural Gas Policy Act of 1978 ("NGPA"). The major goals of the NGPA were to permit economic market forces to establish the wellhead price of gas and to match supplys with the demands for gas. As a result of the provisions in the NGPA, certain (new contract) wellhead gas prices skyrocketed and the demand for natural gas plummeted. In response to these increasing costs for "new" gas, pipelines across the U.S. entered into long-term take-or-pay contracts with gas producers.[2/]

[2/] Take-or-pay gas contracts refer to required payments for gas purchases, whether the gas is actually purchased or not.

By the early 1980's, pipelines were facing decreasing demand (sales) and large fixed costs as a result of their take-or-pay contracts for the purchase of gas. It was during this period (1983) that SCPC requested an experimental ISPR so that gas sales to customers could be preserved and its large fixed costs could be spread over a larger number of unit sales. During the same period, the Columbia Gas system declared a force majeure regarding its obligations for take-or-pay contracts and put the industry and regulators in turmoil. In an effort to maintain sales volumes from industrial customers with alternative fuel capabilities, the FERC authorized "Special Marketing Programs" whereby industrial customers with alternative fuel capabilities would be offered cheaper gas supplies than captive customers with no alternatives to natural gas. FERC's position was that the SMP programs were hopefully the lesser of two evils and that the SMPs would provide more "good than harm" by maintaining sales volumes, thereby allowing fixed costs to be spread over more units. In 1985, the D.C. Circuit Court of Appeals found the SMPs to be discriminatory and the SMPs were eliminated.[3/]

Also in 1985, FERC issued Order No. 436 that encouraged pipelines to unbundle their merchant and transportation functions, thereby allowing customers to purchase gas on their own. Finally, in 1992 FERC issued Order No. 636 that required nondiscriminatory open access transportation service to all customers.

The required unbundling of natural gas service and non discriminatory open access transportation service moderated the concerns or desires to retain natural gas volumes from customers with alternative fuel capabilities. This is so because the industrial customers were now not forced to buy gas from their LDC (or Pipeline) but could now go on the open market and purchase their own fuel supplies. Because wellhead natural gas prices are now fully deregulated, the price of natural gas and alternative fuels are on an even playing field. If the market price of natural gas is higher than alternative fuels, economic efficiency is best served by using the alternative

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[3/] Maryland People's Counsel v. Federal Energy Regulatory Commission, 761 F.2d 768 (D.C. Cir.1985) and Maryland People's Counsel v. Federal Energy Regulatory Commission, 761 F.2d 780 (D.C. Cir. 1985).

fuel.[4/] As with other fuel types industrial end-users are now free to choose their supplier of natural gas and market forces determine the most efficient prices and consumption of natural gas.

Q. ON WHAT BASIS HAS THIS COMMISSION AND THE COMMISSION STAFF SUPPORTED THE CONTINUATION OF THE ISPR?

A. I have reviewed the testimony of the Commission Staff as well as the Commission's orders in several SCPC gas cost cases. In each of the cases I reviewed, the Commission Staff was of the opinion and the Commission concurred that the ISPR should be continued because it provided benefits to SCPC's firm customers because it prevented the threat of reduced sales volumes from interruptible customers, and hence SCPCs' fixed costs could be spread over more units which result in lower overall prices to all customers.

Q. IN YOUR REVIEW OF THESE PRIOR CASES, DID YOU FIND ANY ANALYTICAL OR QUANTITATIVE SUPPORT FOR THESE FINDINGS?

A. No.

Q. WHEN WE MENTION SCPC'S "FIXED COSTS," WHAT COSTS ARE WE REFERRING TO?

A. Unlike interstate pipelines that provide only transportation services, SCPC also purchases gas on behalf of its customers and resells this gas. In addition to the variable purchased gas costs it incurs, SCPC also provides transportation services in that it connects and transports gas from upstream pipelines to its customers. The costs associated with SCPC's infrastructure (pipes)

[4/] Industrial users will generally pay somewhat of a premium for natural gas as it is cleaner burning, often safer, and is not subject to emissions requirements.

include capital costs (return on and return of investment), as well operating and maintenance costs. Many of these costs are considered fixed in nature and are recovered through SCPC's base rates.

Q. UPSTREAM PIPELINE DEMAND OR RESERVATION CHARGES ARE OFTEN REFERRED TO AS "FIXED" IN NATURE. IF ISPR SALES VOLUMES WERE TO DECLINE, WOULD THESE FIXED UPSTREAM DEMAND CHARGES HAVE TO BE COLLECTED FROM A SMALLER SALES VOLUMES?

A. No.

Q. PLEASE EXPLAIN.

A. Upstream demand charges are paid by SCPC to reserve (guarantee) capacity for its firm customers during periods of peak use. These demand charges are fully paid for by firm customers, and interruptible customers do not contribute to the collection of demand charges since they are not guaranteed service during periods of peak system use.

Q. HYPOTHETICALLY, IF SCPC WERE TO LOSE ISPR CUSTOMERS COULD THIS CAUSE AN INCREASE IN RATES PAID BY FIRM CUSTOMERS?

A. Firm customers rates could increase or decrease depending on the actual circumstances. If interruptible (ISPR) customers are contributing more than their short run marginal cost, and those customers leave the system, it is possible that SCPC may need to request an increase in its base rates. On the other hand, if interruptible customers are charged less than short run marginal costs, firm customers are better off without these customers on the SCPC system.

Q. PLEASE DEFINE AND EXPLAIN TO THE COMMISSION THE TERM SHORT-RUN MARGINAL COST.

A. Economists categorize costs as "short-run" and "long-run". The economic short-run is that period of time wherein a firm's production facilities do not vary; i.e., existing plant and equipment does not change. The long run is that period over which production facilities changes (plant is added or retired). Therefore, because facilities are "fixed" in the short-run, a firm's total costs are comprised of fixed costs (costs that do not vary with output) and variable costs (costs that vary in direct proportion to output). In the long-run, the level of facilities change, or vary. Hence, in the long-run all costs are variable.

The term "marginal cost" refers to the change in total cost resulting from a change in one unit of output. In other words, if output is increased (decreased) by one unit, the increase (decrease) in total cost that results is the marginal cost. Therefore, because the only costs that vary with output in the short-run are variable costs, short-run marginal costs include only variable costs.

In the short-run, a competitive firm will continue to operate if it can collect anything more than total variable costs. This is so because the firm is collecting its day-to-day operating expenses and making some contribution to fixed costs. However, there can be a significant difference between average variable cost and short-run marginal cost.

This difference is caused by increasing or decreasing costs per unit. In very simple terms, most plants have a maximum level of efficiency such that at low levels of production, the production facilities become more and more efficient with increased usage (decreasing costs). Under these circumstances the incremental (marginal) cost to produce one more unit is less than it cost to produce the last unit. At this low level of production, short-run marginal cost is less than average variable cost. Similarly, after a plant reaches maximum efficiency, it costs more to produce the next unit than it did to produce the last unit. Under this situation marginal costs are greater than average variable costs. When a plant is near its maximum output capacity, it tends to be very inefficient and short-run marginal costs are significantly greater than average variable costs. A simple analogy is

fuel economy in a automobile. At very low speeds in first gear, gas mileage is not very good. As power (output) is increased, speed increases and fuel economy increases because the drive train becomes more efficient. Once speed and power reaches a certain point, efficiency is maximized, and while additional power will generate more speed it will do so only at a much higher cost per mile an hour.

Q. IS THE SHORT-RUN MARGINAL COST OF GAS DIFFERENT THAN THE AVERAGE VARIABLE COST OF GAS?

A. Generally yes. SCPC, as well as other natural gas utilities attempt to purchase the cheapest gas available to meet its current needs. As those needs (demand) increase, SCPC must buy more gas, usually at a higher price to meet those needs. Therefore, the short-run marginal cost of gas to SCPC is usually greater than the average variable cost of gas. The exception to this is when spot market prices are declining rapidly and the incremental gas purchased may be cheaper than the average cost of gas.

Q. INTERRUPTIBLE CUSTOMERS ARE OFTEN REFERRED TO AS "OPPORTUNITY" CUSTOMERS. PLEASE EXPLAIN THIS CONCEPT.

A. Pipelines and LDCs are designed and built to meet the maximum demands of their firm customers. Even though firm customers may only need the full capacity of the system during a few days of the year, enough capacity must, nevertheless, be available to satisfy the maximum demand of firm customers. Therefore, there is significant unused capacity available on the system during the vast majority of days during the year. Interruptible customers provide pipelines and LDCs with an opportunity to utilize this otherwise unused capacity. Because firm customers have already paid for the fixed costs associated with the total system's capacity, the utility and its ratepayers benefit if an opportunity sale can be made at a rate (price) grater than the incremental (short-run marginal)

cost to make this opportunity (interruptible sale). However, if demand is such that the incremental price is lower than the incremental cost, this is not a viable opportunity, and this prospective customer should be foregone.

Q. BUT FOR THE CHEAPEST 20,000 DTH PER DAY OF SYSTEM GAS, YOU TESTIFIED THAT UNDER THE CURRENT METHOD THE CHEAPEST COST OF GAS IS ASSIGNED TO ISPR CUSTOMERS AND THE HIGHEST COG ASSIGNED TO FIRM CUSTOMERS. GIVEN YOUR DISCUSSION OF MARGINAL COSTS, VARIABLE COSTS, AND OPPORTUNITY SALES, IS THIS ASSIGNMENT PROPER OR REASONABLE?

A. No.

Q. PLEASE EXPLAIN.

A. The SCPC system is designed and paid for by firm customers. Firm customers are obligated to pay for the capacity costs relating to the SCPC system in their base rates and pay for upstream pipeline demand charges in their demand cost of gas. In fact, the SCPC Gas tariff is clear that firm customers have first claim to the use of SCPC's facilities. It is obvious that firm customers are first on the system and therefore, are responsible for the first levels of usage and attendant cost of gas. Only after firm requirements are met are interruptible customers able to use the system. Therefore, the gas cost associated with interruptible (ISPR) sales, are those attributable to the last and highest gas costs.

Q. IN YOUR DISCUSSION OF THE RECENT HISTORY OF THE U.S. NATURAL GAS INDUSTRY YOU MENTIONED SPECIAL MARKETING PROGRAMS THAT WERE DEEMED DISCRIMINATORY BY THE U.S. COURT OF APPEALS, AND ELIMINATED. ARE YOU FAMILIAR WITH THESE THE SPECIAL MARKETING PROGRAMS AND THIS APPELLATE CASE?

A. Yes.

Q. PLEASE EXPLAIN WHAT THESE SPECIAL MARKETING PROGRAMS WERE AND WHY THEY WERE DECLARED DISCRIMINATORY BY THE COURT OF APPEALS.

A. As I indicated in my brief discussion of the recent history of the natural gas industry, the early 1980's saw decreasing demand for natural gas largely due to the increasing prices of delivered natural gas. Well head gas prices were increasing, and pipelines had entered into take-or-pay contracts for gas. As a result, industrial customers were switching away from natural gas in favor of alternative fuels. At the same time, the Columbia transmission system was in dire financial straits and was attempting somehow to recover its large fixed take-or-pay obligations. In an attempt to increase natural gas pipeline competition and demand, the FERC approved an experimental Special Marketing Program ("SMP") in August 1983 for Columbia Gas Transmission Corporation. This, and later other, SMPs arbitrarily separated old cheaper gas contracts from newer, more expensive, gas contracts. The old, cheaper gas was then only made available to industrial customers with alternative fuel capabilities. Firm gas customers (or gas purchased on behalf of firm customers) were not entitled to participate in these SMP's. Although FERC realized it was approving a significant level of price discrimination it believed that more "good than harm would come of its experimental action." In May, 1985 the U.S. Court of Appeals for the District of Columbia Circuit found the SMPs to be unduly discriminatory and the SMPs were eliminated.

Q. HAVE YOU CONDUCTED AN ANALYSIS COMPARING THE COST OF GAS ASSIGNED TO FIRM CUSTOMERS, AND THOSE ASSIGNED TO ISPR CUSTOMERS FOR THE PERIOD UNDER REVIEW?

A. Yes.

Q. HAVE YOU ALSO CONDUCTED A STUDY OF THE INCREMENTAL COST OF GAS TO SERVE INTERRUPTIBLE CUSTOMERS AND THE SCPC SYSTEM AVERAGE VARIABLE COST OF GAS FOR THE PERIOD UNDER REVIEW?

A. Yes.

Q. PLEASE PRESENT THE RESULTS OF YOUR ANALYSES AND STUDIES.

A. For each month of the period under review, I have calculated, or obtained directly from discovery responses, the Commodity Cost of Gas ("COG") assigned to the ISPR program as well as the commodity COG assigned to firm customers. In addition, I have also calculated the combined commodity COG's assigned to ISPR and Firm resale customers, SCPC's total pipeline actual total commodity COG, and the Incremental COG to serve ISPR customers. The results of these analyses are presented on Schedule 1 of my Exhibit___(GAW-1).

As can readily be seen, the COG assigned to the ISPR class is significantly lower than the average variable COG for firm customers, and that of the SCPC system each and every month during 2003. The cost assigned to ISPR customers is also lower than the Incremental COG to serve these same customers. A comparison of these month COG amounts are also provided graphically in my Chart 1.

Schedule 2 provides a comparison of the ISPR allocated and firm billed COG. Over the course of 2003, the COG paid by firm customers was 21.5% ($1.275) higher than the COG assigned to ISPR customers.

Q. DO THE MONTHLY FIRM COG AMOUNTS SHOWN IN COLUMN (2) OF SCHEDULE 1 INCLUDE THE RISK PRICE ADJUSTMENT FACTOR?

A. No. Firm customers bear the risk and rewards of SCPC's gas hedging program, while ISPR customers do not participate in the program. The monthly Risk Price Adjustment relates to the hedging program and is positive (add-on to COG) in some months and negative (deduction) in other months. Therefore, because ISPR customers do not participate in this program it is not appropriate to include this in comparing the two classes' COG. However, I do show a comparison of the monthly firm and ISPR COG with and without the Risk Price adjustment on my Schedule 2.

Q. WHY ARE THE AVERAGE ISPR PLUS FIRM RESALE AMOUNTS IN COLUMN (3) OF SCHEDULE 1 SOMEWHAT DIFFERENT THAN THE AVERAGE TOTAL SCPC COG AMOUNTS IN COLUMN (4)?

A. There are two reasons. First, the amounts in Column (3) of Schedule 1 (ISPR + Firm Resale) are based on the COG assigned to ISPR and Firm customers for billing purposes. The monthly COG amounts for ISPR and firm customers were obtained directly from the monthly reports submitted to the Commission and establish the actual billed WACOG per month. These monthly reports include allocations and reflect net injections/withdrawals from storage, company usage and shrinkage, and LNG boil off. The amounts in Column (4) (Total SCPC Avg. LOG) reflect SCPC's actual total monthly system commodity purchases.

The second reason is that Column (3) (ISPR + Firm Resale COG) reflects ISPR and Firm resale sales volumes. In addition to these volumes, SCPC also purchases gas under a special contract rate for the SCE&G Urquhart generating station, and a small amount for firm retail sales customers. Again, the Total SCPC amounts [Column (4)] reflect total SCPC monthly purchases.

Q. PLEASE EXPLAIN HOW YOU CALCULATED THE ISPR INCREMENTAL COG.

A. The ISPR incremental COG is provided in my Schedule 5. The method used to calculate the ISPR incremental COG was to price the most expensive cost of gas first (usually spot purchases), the second most expensive gas next, and so on until the total ISPR Gas is priced. As a note, for simplicity sake, a long-term contract gas was priced at the overall weighted average price each month.

Q. THE COG AMOUNTS ASSIGNED TO ISPR SHOWN IN COLUMN (1) OF YOUR SCHEDULE 1 ARE LOWER THAN ANY STANDARD EACH MONTH. DOES THIS MEAN THAT SCPC IS LOSING MONEY ON ISPR SALES?

A. Not at all. It is important to remember how SCPC's gas cost allocation method works. SCPC recovers all of its gas costs by allocating its total commodity gas costs between ISPR and firm customers. The ISPR customers are arbitrarily assigned lower gas costs per unit than it actually costs to provide this gas, and the firm customers are assigned the remaining gas costs (those costs not assigned to ISPR). This results in gas costs assigned to firm customers higher than the actual cost to provide such gas. Because firm customers are captive to SCPC, these higher than actual gas costs are absorbed and paid for by the captive customers. The end result is, firm customers pay much more than the actual cost of gas, while ISPR customers pay rates for natural gas that are commensurate with alternative fuels. This approved method protects SCPC's ISPR

margins by arbitrarily reducing the cost of gas assigned these customers and having firm customers pick up the tab for the ISPR COG subsidy.

To illustrate, the price of gas paid by all sales customers of SCPC has two components: the cost of gas plus a margin (profit) on that gas. If the actual cost of gas is $6.00/Dth, and the cost of alternative fuels is $5.75/Dth, SCPC will implicitly assign a cost of gas component to the rate such that the sale can be made, and the margin remains protected. In this example, if the target margin is $1.25/Dth, SCPC can charge $5.75 for the ISPR gas, and implicitly assign $4.00 to the cost of gas. The remaining $2.00 ($6.00-$4.00) is then absorbed by the allocated cost of gas paid by firm customers, and the $1.25 margin is protected.

Q. BASED ON YOUR ANALYSIS AND STUDIES OF SCPC'S COG, WHAT ARE YOUR CONCLUSIONS REGARDING THE ISPR?

A. The ISPR is an arbitrary and capricious pricing method that results in undue price discrimination. Due to the basic structure of the ISPR allocation method, the ISPR is nothing more than a profit maximizing mechanism for SCPC. Moreover, due to the excessively large maximum margins allowed for the ISPR program, industrial customers may pay rates far in excess of cost of service during certain periods of time when alternative fuels are expensive relative to the arbitrary allocations of ISPR COG.

Q. PLEASE EXPLAIN WHAT IS MEANT BY UNDUE PRICE DISCRIMINATION.

A. In our society, the word "discrimination" tends to imply negative or unwanted results. However, there are many forms of price discrimination, some of which are fair (due) and others than are unfair (undue). An example of due, or fair, price discrimination is interruptible rates priced below fulled allocated costs but higher than variable costs; i.e., interruptibles pay less than average system costs but more than variable costs, and hence provide a benefit to all ratepayers.

Undue price discrimination occurs when a firm has monopoly power and can unfairly charge one group of customers a rate higher than another group. Undue price discrimination results in excess monopoly profits and/or economic cross subsidization of resources.

Economists define undue price discrimination as a price offered to one group of customers below short run marginal costs. This is the same standard used by regulatory agencies and the courts for undue price discrimination as well as for predatory pricing.

Q. WHY ARE THE APPROVED ISPR MARGIN CEILINGS EXCESSIVE?

A. SCPC's rates have not changed for almost 22 years (December 1982). The approved industrial gas sales margin ceilings range from a low of $0.65/Dth to a high of $1.46/Dth depending on interruptible priority. These margins compare to an approved firm resale margin of $0.0753/Dth. Considering that SCPC has not had a full rate case in almost 22 years, and that firm sales margins of $0.0753 have been adequate enough to prevent any rate increase requests, industrial gas margin ceilings of 8.5 to 19 times greater than fixed firm margins, clearly are not cost based.

Q. ARE YOU AWARE OF OTHER COMMISSIONS OR JURISDICTIONS THAT HAVE ASSIGNED CHEAPER GAS COSTS TO CUSTOMERS WITH ALTERNATIVE FUEL CAPABILITIES?

A. Yes. I am familiar with the short lived Special Marketing Programs approved by FERC in 1982-1985. In the very early 1980's a few states, namely Michigan, instituted similar programs, (likely in response to the FERC SMP's). Michigan quickly abandoned its SMP program in the early 1980's. Since pipelines have opened up their systems to transportation, there is no need to promote the sale of gas, as the gas supply market is clearly competitive and industrial users are now free to purchase gas from whom ever they want, at market based prices.

Although, I agreed with the U.S. Appellate Court's reasoning for abolishing price discrimination in gas costs, I was also sympathetic to the desires and goals of regulators in the early 1980's, when gas supply markets were not competitive, and transportation was not available to industrial users. However, the natural gas industry is much different today than is was 20+ years ago, and there is not basis for such discrimination today.

Q. IN YOUR OPINION, IS IT PROPER REGULATORY POLICY TO SUBSIDIZE THE COST OF GAS FOR CERTAIN SCPC CUSTOMERS?

A. No. This is particularly true now that industrial customers have the ability to purchase and transport their own gas at prices that are derived by open competition and market supply and demand. There is no benefit of protecting the merchant function of SCPC as it relates to interruptible industrial customers. Therefore, since SCPC provides a merchant function to some customers and transportation function only to other customers, it is proper regulatory policy to fairly price the merchant function and the transportation function with no cross subsidies between the two.

Q. IS THIS TRUE EVEN IF AN INCREASE IN SCPC BASE RATES (TRANSPORTATION FUNCTION) IS REQUIRED?

A. Yes.

Q. ARE YOU SAYING THAT INTERRUPTIBLE INDUSTRIAL CUSTOMERS SHOULD NOT BE OFFERED FLEXIBLE PRICING?

A. Although economic efficiency would likely be better served without flexible industrial pricing, this Commission may decide that the South Carolina public interest is better served with the ability to offer pricing flexibility, also known as reasonable or fair price discrimination. However, let me be emphatically clear, the ISPR as it is presently structured is not in the public interest and results in undue price discrimination.

Q. IF THE COMMISSION ABANDONED THE CURRENT ISPR OR CONTINUES WITH SOME FORM OF PRICING FLEXIBILITY, HOW SHOULD GAS COSTS BE ASSIGNED TO INTERRUPTIBLE CUSTOMERS?

A. Gas costs are generally assigned to customers (or classes) based on average costs. I concur with the general consensus that gas costs should be assigned to all classes based on average costs. Should this Commission decide that flexible industrial pricing should be continued, it is paramount that any discounts be subtracted from the margin and not arbitrarily allocated away from the true cost of gas.

Q. MR. WATKINS, YOUR ANALYSES AND TESTIMONY THUS FAR HAS BEEN PREDICATED ON A NEED TO ACCURATELY SEPARATE AND PRICE THE COST OF GAS FROM BASE RATE COSTS. IS THAT CORRECT?

A. Yes. Proper pricing signals between SCPC's merchant function and transportation function are critical for economic efficiency and fairness to all ratepayers. This is especially important now that customers have the ability to buy gas elsewhere and transport their own gas. In this regard, the cost of gas should be priced fairly, as should the base rates (transportation function) of SCPC.

Q. NOT WITHSTANDING THE ALLOCATION OF GAS COSTS TO ISPR CUSTOMERS, SCPC ACTUALLY CHARGES THESE CUSTOMERS A RATE HIGHER THAN THE ALLOCATED COG, IS THAT CORRECT?

A. The current allocation method does not guarantee that every customer's rate will be higher than the allocated ISPR COG. This is because SCPC prices each ISPR individually, but assigns gas costs based on the classes' aggregate usage. Therefore, it is possible that an individual ISPR customer may be offered a rate even lower than its already arbitrarlly low allocated cost of gas.

Q. ASSUMING, THAT IN REALITY, SCPC USUALLY CHARGES ISPR CUSTOMERS A RATE GREATER THAN ITS ALLOCATED COST OF GAS, THERE IS A MARGIN ASSOCIATED WITH THIS SALE, IS THAT CORRECT?

A. A margin can be imputed, but only as a result of the discriminatory method of allocating gas costs. As I testified earlier, the current ISPR mechanism protects SCPC's margins by assigning excessive gas costs to firm, captive customers.

Q. GIVEN THE RATES THAT SCPC ACTUALLY CHARGED ITS ISPR CUSTOMERS DURING 2003; AND FOR ARGUMENT SAKE, ASSUMING IT IS NOT NECESSARY TO PROPERLY SEPARATE SCPC'S MERCHANT FUNCTION FROM ITS TRANSPORTATION FUNCTION, IS THERE ANY EVIDENCE THAT SCPC CHARGED ISPR CUSTOMERS RATES LESS THAN SHORT RUN MARGINAL COST, OR AVERAGE VARIABLE COST?

A. Yes, there are numerous instances.

Q. PLEASE EXPLAIN.

A. It is important to remember that the rate actually charged an ISPR customer must cover the cost to purchase the gas and then transport that gas through the SCPC system to the customer. Up to this point we have only talked about the cost of gas, which again should be priced properly with no undue discrimination or cross-subsidization. I have identified numerous examples, in which the total rate charged ISPR customers is less than the average variable or incremental cost to serve that customer. My schedule 6, consisting of 12 pages, provides a tabulation of examples in which the rate charged is below incremental or average variable cost.

Q. PLEASE EXPLAIN SCHEDULE 6.

A. Remembering that in addition to the cost of gas, SCPC must transport the gas to each customer, I have used the interuptible transportation rate of $0.2842/Dth as a cost basis to transport ISPR gas from SCPC's upstream interconnections to customers' meters. To this amount, I added each cost based standard I calculated (ISPR + Firm average COG, Total SCPC system average COG, and ISPR COG). I then compared the lowest cost standard to the rate actually charged individual customers as provided in response to Consumer Advocate No. 1-7. The results on page 1 through 12 (one page per month of 2003) provide a listing of examples I found in which the rate is below variable or incremental cost.

Q. IN THESE INSTANCES WOULD FIRM CUSTOMERS HAVE BEEN BETTER OFF WITHOUT THESE ISPR SALES?

A. Yes.

Q. IN THESE INSTANCES WOULD SCPC HAVE BEEN BETTER OFF WITHOUT THE ISPR SALES IN SCHEDULE 6?

A. No. As I discussed earlier, SCPC is able to protect its margins by allocating the difference between actual and allocated gas costs back to firm customers, thus insuring collection of all gas costs, and preservation of profits.

Q. HAVE YOU CALCULATED THE SAVINGS THAT FIRM RESALE RATE PAYERS WOULD HAVE REALIZED, HAD ISPR AND FIRM RESALE CUSTOMERS BEEN ASSIGNED THE SAME LEVEL OF AVERAGE COMMODITY GAS COSTS IN 2003?

A. Yes. SCPC's firm resale ratepayers would have saved $11,005,000 during 2003.

Q. PLEASE PROVIDE A SUMMARY OF YOUR RECOMMENDATIONS.

A. I recommend the elimination of the ISPR program and flexible interruptible pricing. The flexible pricing mechanism as it is currently structured in unduly discriminatory, and not needed in this era of competitive gas supply markets and open access transportation. Should the Commission decide to retain some form of pricing flexibility to interruptible customers, it should do so by assigning all commodity costs of gas to all classes on the same basis so that all customers pay the

same commodity cost of gas. Finally, should a flexible pricing mechanism be continued, the commodity cost of gas will be the same for all customers, and any discounts should come from SCPC's margins.

Q. DOES THE COMPLETE YOUR TESTIMONY?

A. Yes.

APPENDIX

RESUME OF GLENN A. WATKINS

BACKGROUND & EXPERIENCE PROFILE

GLENN A. WATKINS

VICE PRESIDENT/SENIOR ECONOMIST
TECHNICAL ASSOCIATES, INC.

EDUCATION

1982 - 1988	M.B.A., Virginia Commonwealth University, Richmond, Virginia
1980 - 1982	B.S., Economics; Virginia Commonwealth University
1976 - 1980	A.A., Economics; Richard Bland College of The College of William and Mary, Petersburg, Virginia

POSITIONS

Jul. 1995-Present	Vice President/Senior Economist, Technical Associates, Inc.
Mar. 1993-1995	Vice President/Senior Economist, C. W. Amos of Virginia
Apr. 1990-Mar. 1993	Principal/Senior Economist, Technical Associates, Inc.
Aug. 1987-Apr. 1990	Staff Economist, Technical Associates, Inc., Richmond, Virginia
Feb. 1987-Aug. 1987	Economist, Old Dominion Electric Cooperative, Richmond, Virginia
May 1984-Jan. 1987	Staff Economist, Technical Associates, Inc.
May 1982-May 1984	Economic Analyst, Technical Associates, Inc.
Sep. 1980-May 1982	Research Assistant, Technical Associates, Inc.

EXPERIENCE

I. Public Utility Regulation

A. Costing Studies -- Conducted, and presented as expert testimony, numerous embedded and marginal cost of service studies. Cost studies have been conducted for electric, gas, telecommunications, water, and wastewater utilities. Analyses and issues have included the evaluation and development of alternative cost allocation methods with particular emphasis on ratemaking implications of distribution plant classification and capacity cost allocation methodologies. Distribution plant classifications have been conducted using the minimum system and zero-intercept methods. Capacity cost allocations have been evaluated using virtually every recognized method of allocating demand related costs (e.g., single and multiple coincident peaks, non-coincident peaks, probability of loss of load, average and excess, and peak and average).

Embedded and marginal cost studies have been analyzed with respect to the seasonal and diurnal distribution of system energy and demand costs, as well as cost effective approaches to incorporating energy and demand losses for rate design purposes. Economic dispatch models have been evaluated to determine long range capacity requirements as well as system marginal energy costs for ratemaking purposes.

B. Rate Design Studies -- Analyzed, designed and provided expert testimony relating to rate structures for all retail rate classes, employing embedded and marginal cost studies. These rate structures have included flat rates, declining block rates, inverted block rates, hours use of demand blocking, lighting rates, and interruptible rates. Economic development and special industrial rates have been developed in recognition of the competitive environment for specific customers. Assessed alternative time differentiated rates with diurnal and seasonal pricing structures. Applied Ramsey (Inverse Elasticity) Pricing to marginal costs in order to adjust for embedded revenue requirement constraints.

C. Forecasting and System Profile Studies -- Development of long range energy (Kwh or Mcf) and demand forecasts for rural electric cooperatives and investor owned utilities. Analysis of electric plant operating characteristics for the determination of the most efficient dispatch of generating units on a system-wide basis. Factors analyzed include system load requirements, unit generating capacities, planned and unplanned outages, marginal energy costs, long term purchased capacity and energy costs, and short term power interchange agreements.

D. Cost of Capital Studies -- Analyzed and provided expert testimony on the costs of capital and proper capital structures for ratemaking purposes, for electric, gas, telephone, water, and wastewater utilities. Costs of capital have been applied to both actual and hypothetical capital structures. Cost of equity studies have employed comparable earnings, DCF, and CAPM analyses. Econometric analyses of adjustments required to electric utilities cost of equity due to the reduced risks of completing and placing new nuclear generating units into service.

E. Accounting Studies -- Performed and provided expert testimony for numerous accounting studies relating to revenue requirements and cost of service. Assignments have included original cost studies, cost of reproduction new studies, depreciation studies, lead-lag studies, Weather normalization studies, merger and acquisition issues and other rate base and operating income adjustments.

II. Transportation Regulation

A. Oil and Products Pipelines -- Conducted cost of service studies utilizing embedded costs, I.C.C. Valuation, and trended original cost. Development of computer models for cost of service studies utilizing the "Williams" (FERC 154-B) methodology. Performed alternative tariff designs, and dismantlement and restoration studies.

B. Railroads -- Analyses of costing studies using both embedded and marginal cost methodologies. Analyses of market dominance and cross-subsidization, including the implementation of differential pricing and inverse elasticity for various railroad commodities. Analyses of capital and operation costs required to operate "stand alone" railroads. Conducted cost of capital and revenue adequacy studies of railroads.

III. Insurance Studies

Conducted and presented expert testimony relating to market structure, performance, and profitability by line and sub-line of business within specific geographic areas, e.g. by state. These studies have included the determination of rates of return on Statutory Surplus and GAAP Equity by line - by state using the NAIC methodology, and comparison of individual insurance company performance vis a vis industry Country-Wide performance.

Conducted and presented expert testimony relating to rate regulation of workers compensation, automobile, and professional malpractice insurance. These studies have included the determination of a proper profit and contingency factor utilizing an internal rate of return methodology, the development of a fair investment income rate, capital structure, cost of capital.

Other insurance studies have included testimony before the Virginia Legislature regarding proper regulatory structure of Credit Life and P&C insurance; the effects on competition and prices

resulting from proposed insurance company mergers, maximum and minimum expense multiplier limits, determination of specific class code rate increase limits (swing limits); and investigation of the reasonableness of NCCI's administrative assigned risk plan and pool expenses.

IV. Anti-Trust and Commercial Business Damage Litigation

Analyses of alleged claims of attempts to monopolize, predatory pricing, unfair trade practices and economic losses. Assignments have involved definitions of relevant market areas(geographic and product) and performance of that market, the pricing and cost allocation practices of manufacturers, and the economic performance of manufacturers' distributors.

Performed and provided expert testimony relating to market impacts involving automobile and truck dealerships, incremental profitability, the present value of damages, diminution in value of business, market and dealer performance, future sales potential, optimal inventory levels, fair allocation of products, financial performance; and business valuations.

MEMBERSHIPS AND CERTIFICATIONS

Member, Association of Energy Engineers (1998)
Certified Rate of Return Analyst, Society of Utility and Regulatory Financial Analysts (1992)
Member, American Water Works Association
National Association of Business Economists
Richmond Association of Business Economists
National Economics Honor Society

South Carolina Pipeline Corporation
Industrial Sales Program Rider ("ISPR")
Imputed Cost of Gas ("COG")
Relative to Average & Incremental Costs of Gas
(2003)

Month	(1) ISPR COG $/Dth 1/	(2) Firm COG $/Dth 1/	(3) ISPR + Firm Resale COG $/Dth 2/	(4) Total SCPC Avg. COG $/Dth 3/	(5) ISPR Incremental COG $/Dth 4/
January	$5.0687	$5.7479	$5.4674	$5.4583	$5.8037
February	5.8096	5.8912	5.8750	5.9128	5.9662
March	8.5931	9.1736	9.0332	9.1133	9.4793
April	5.2722	6.1830	5.5139	5.2934	5.3009
May	5.2618	6.4593	5.4693	5.2752	5.2765
June	6.0802	7.1858	6.2802	6.0827	6.0910
July	5.5207	6.7302	5.7189	5.4770	5.5316
August	4.8057	6.0575	4.9988	4.8142	4.8160
September	5.0139	6.0674	5.1845	4.9913	5.0473
October	4.5438	5.3329	4.7173	4.5517	4.5524
November	4.5925	5.7101	4.9625	4.5939	4.5939
December	5.0002	5.8069	5.4328	5.1645	5.2927

1/ Per Schedule 2.
2/ Per Schedule 3.
3/ Per Schedule 4.
4/ Per Schedule 5.

South Carolina Pipeline Corporation
Industrial Sales Program Rider ("ISPR")
&
Firm Resale Sales
Cost of Gas
(2003)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	ISPR			Firm Resale Sales				Firm Resale Less ISPR	
Month (2003)	Billed Dth 1/	Total Gas Cost 1/	Gas Cost Per Dth (2) / (1)	Billed Dth 2/	Firm Cost of Gas 3/	Firm Risk Price Adj. 3/	Firm COG with Risk Adj. 4/	Cost of Gas (5) - (3)	COG with Risk Adj. (7) - (3)
January	4,865,995	$24,664,364	$5.0687	6,914,304	$5.7479	-$0.6100	$5.1379	$0.6792	$0.0692
February	1,747,339	10,151,417	5.8096	7,054,349	5.8912	-0.4861	5.4051	0.0816	-0.4045
March	1,442,736	12,397,574	8.5931	4,522,912	9.1736	-1.2367	7.9369	0.5805	-0.6562
April	4,059,016	21,399,920	5.2722	1,466,235	6.1830	-0.2032	5.9798	0.9108	0.7076
May	3,958,955	20,831,215	5.2618	829,814	6.4593	-0.1508	6.3085	1.1975	1.0467
June	3,268,162	19,870,975	6.0802	721,781	7.1858	-0.3292	6.8566	1.1056	0.7764
July	3,555,113	19,626,861	5.5207	696,518	6.7302	0.0102	6.7404	1.2095	1.2197
August	3,796,390	18,244,309	4.8057	692,266	6.0575	-0.0168	6.0407	1.2518	1.2350
September	3,726,770	18,685,533	5.0139	720,112	6.0674	0.0306	6.0980	1.0535	1.0841
October	3,747,244	17,026,581	4.5438	1,056,616	5.3329	0.0501	5.3830	0.7891	0.8392
November	3,771,075	17,318,668	4.5925	1,866,280	5.7101	0.0373	5.7474	1.1176	1.1549
December	4,024,481	20,123,309	5.0002	4,654,363	5.8069	$0.0432	5.8501	0.8067	0.8499
Total	41,963,276	$220,340,724		31,195,550					
Weighted Avg.			$5.2508		$6.3783	--	$5.9436	$1.1275	$0.6928

1/ Per response to Consumer Advocate 2-6.
2/ Per response to Consumer Advocate 1-8.
3/ Per response to Consumer Advocate 1-3.
4/ Per response to Consumer Advocate 1-3 & 1-8.

Note: December amount in column (6) excludes 299,730 Dth for Customer #13 because there are no gas costs reported for this customer.

South Carolina Pipeline Corporation
Industrial Sales Program Rider ("ISPR")
&
Firm Resale Sales
Cost of Gas
(2003)

Month	(1) ISPR Total Gas Cost 1/	(2) Firm Resale Total Gas Cost 2/	(3) Firm Resale + ISPR Total Gas Cost (1) + (2)	(4) ISPR Dth Sales 1/	(5) Firm Resale Dth Sales 2/	(6) Firm Resale + ISPR Dth Sales (4) + (5)	(7) Firm Resale + ISPR COG $/Dth (3) / (6)
January	$24,664,364	$39,742,728	$64,407,092	$4,865,995	$6,914,304	$11,780,299	$5.4674
February	10,151,417	41,558,581	51,709,998	1,747,339	7,054,349	8,801,688	5.8750
March	12,397,574	41,491,386	53,888,959	1,442,736	4,522,912	5,965,648	9.0332
April	21,399,920	9,065,731	30,465,651	4,059,016	1,466,235	5,525,251	5.5139
May	20,831,215	5,360,018	26,191,232	3,958,955	829,814	4,788,769	5.4693
June	19,870,975	5,186,574	25,057,549	3,268,162	721,781	3,989,943	6.2802
July	19,626,861	4,687,705	24,314,566	3,555,113	696,518	4,251,631	5.7189
August	18,244,309	4,193,401	22,437,711	3,796,390	692,266	4,488,656	4.9988
September	18,685,533	4,369,208	23,054,741	3,726,770	720,112	4,446,882	5.1845
October	17,026,581	5,634,827	22,661,408	3,747,244	1,056,616	4,803,860	4.7173
November	17,318,668	10,656,645	27,975,313	3,771,075	1,866,280	5,637,355	4.9625
December	20,123,309	27,027,421	47,150,729	4,024,481	4,654,363	8,678,844	5.4328
Total	$220,340,724	$198,974,224	$419,314,949	$41,963,276	$31,195,550	$73,158,826	
Weighted Avg.							$5.7316

1/ Per Schedule 2.
2/ Per response to Consumer Advocate 1-8.

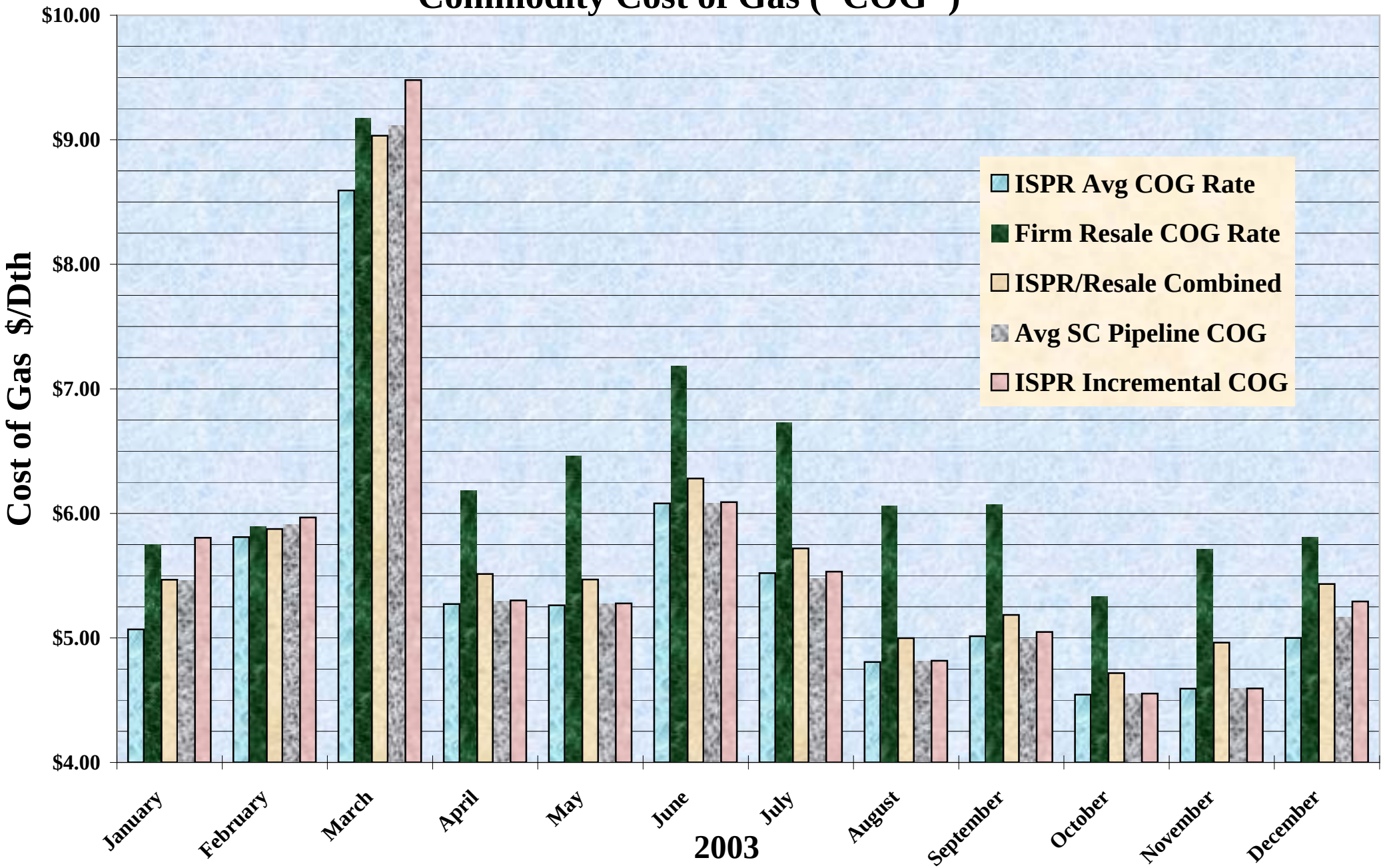
South Carolina Pipeline Corporation
Total SC Pipeline Commodity Purchases
(2003) 1/

Month	(1) Dth	(2) Sales	(3) $/Dth
January	9,764,594	$53,298,469	$5.4583
February	7,752,722	$45,840,243	$5.9128
March	5,982,294	$54,518,418	$9.1133
April	5,578,178	$29,527,300	$5.2934
May	4,830,466	$25,481,796	$5.2752
June	3,911,112	$23,790,014	$6.0827
July	4,080,715	$22,349,999	$5.4770
August	4,482,303	$21,578,771	$4.8142
September	4,313,047	$21,527,602	$4.9913
October	4,757,722	$21,655,740	$4.5517
November	5,203,871	$23,906,087	$4.5939
December	7,645,679	$39,485,911	$5.1645
Total	68,302,703	$382,960,351	
Weighted Avg.			$5.6068

1/ Per response to Commission Staff 1-5 (Attachment 1.5.8).

Exhibit_(GAW-1)
Chart 1

South Carolina Pipeline Corporation
Commodity Cost of Gas ("COG")



South Carolina Pipeline Corporation
ISPR Incremental COG
(January) 2003

Long-term		Dth	Rate	
	SNG-6	64,014	5.2216	$334,256
	Trans-18	2,619,203	5.2126	$13,652,858
	SNG-7	4,245,697	5.0538	$21,456,903
Total LT		6,928,914	5.1154	$35,444,017
Spot				
	Trans-1	138,716	9.9988	$1,386,994
	Trans-2	112,184	9.7526	$1,094,086
	Trans-3	70,000	9.5000	$665,000
	Trans-4	45,000	9.1000	$409,500
	Trans-5	45,000	7.9867	$359,402
	Trans-6	137,450	7.5362	$1,035,851
	Trans-7	260,900	7.3561	$1,919,206
	Trans-8	49,535	7.2451	$358,886
	Trans-9	164,910	7.1173	$1,173,714
	Trans-10	24,994	6.9534	$173,793
	Trans-11	19,912	6.2674	$124,796
	Trans-12	11,823	6.1296	$72,470
	SNG-1	39,940	6.0657	$242,264
	Trans-13	6,854	6.0200	$41,261
	Trans-14	38,389	5.7903	$222,284
	SNG-3	61,749	5.7375	$354,285
	Trans-15	2,461	5.7137	$14,061
	SNG-4	14,042	5.6642	$79,537
	Trans-16	60,191	5.4734	$329,449
	Trans-17	45,611	5.3440	$243,745
	SNG-5	116,195	5.3042	$616,322
	SNG-6	20,000	5.2154	$104,308
	Trans-18	185,965	5.2126	$969,361
	SNG-2	78,829	5.2100	$410,699
	SNG-7	917,291	5.0538	$4,635,805
	Trans-19	109,089	4.9483	$539,805
	Trans-20	24,175	4.7812	$115,586
	SNG-8	34,475	4.7114	$162,426
Total Spot		2,835,680	6.2965	$17,854,896

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	4,865,995		
(b) ISPR sales for month at Spot rate	2,835,680	$6.2965	$17,854,896
(c) Remaining (a) - (b)	2,030,315		
(d) ISPR sales for month at Long term rate	2,030,315	$5.1154	$10,385,829
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	4,865,995		$28,240,725
(h) Weighted Average ISPR COG		$5.8037	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(February) 2003

Long-term		Dth	Rate	
	Trans-9	2,354,687	5.9707	$14,059,130
	SNG-4	798,680	5.9472	$4,749,910
	SNG-5	2,075,363	5.8096	$12,057,029
	SNG-7	234,231	5.7190	$1,339,567
Total LT		5,462,961	5.8953	$32,205,635
Spot				
	Trans-1	15,000	8.3400	$125,100
	Trans-2	28,500	7.4000	$210,900
	Trans-3	24,502	7.0150	$171,882
	Trans-4	27,994	6.8792	$192,576
	SNG-1	30,534	6.8280	$208,486
	Trans-5	14,521	6.6202	$96,132
	Trans-6	24,170	6.5259	$157,731
	SNG-2	53,509	6.5213	$348,948
	Trans-7	14,522	6.3533	$92,263
	SNG-3	106,197	6.2472	$663,434
	Trans-8	24,170	6.1298	$148,157
	Trans-9	133,886	5.9707	$799,393
	SNG-4	905,749	5.9555	$5,394,188
	SNG-5	1,513,704	5.8096	$8,794,015
	Trans-10	29,121	5.7916	$168,657
	SNG-6	43,830	5.7346	$251,348
	Trans-11	98,532	5.6956	$561,199
Total Spot		3,088,441	5.9527	$18,384,409

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	1,747,339		
(b) ISPR sales for month at Spot rate	1,747,339	$5.9662	$10,425,004
(c) Remaining (a) - (b)	0		
(d) ISPR sales for month at Short term rate	0	$0.0000	$0
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Long term rate	0	$0.0000	$0
(g) Total ISPR COG	1,747,339		$10,425,004
(h) Weighted Average ISPR COG		$5.9662	

The Weighted Average Rate for Spot is based on the the amount of Dth required to fill monthly volume. In this instance it is necessary to find the weighted average rate for the first 1,749,339 Dth sold. The first 13 purchases, listed above, accumulate 1.4 million Dth and the first 14 purchases accumulate 2.9 million Dth. Because the required 1,749,339 Dth lies between the 13th (SNG-4) and 14th (SNG-5) accumulated amounts, the Weighted Average Rate relevant to the first 14 purchases is ascribed to the Spot purchase portion in this month.

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(March) 2003

Long-term		Dth	Rate	
	SNG-1	961	9.6518	$9,275
	Trans-1	2,789,646	9.5528	$26,648,930
	SNG-2	2,497,102	9.4031	$23,480,500
	SNG-3	68,615	9.2612	$635,457
Total LT		5,356,324	9.4793	$50,774,163
Spot				
	Trans-2	109,089	9.3382	$1,018,695
	SNG-4	58,440	5.8353	$341,015
	SNG-5	30,750	5.4811	$168,544
	SNG-6	107,755	5.3364	$575,024
	SNG-7	91,862	5.2241	$479,896
	SNG-8	128,322	5.1485	$660,666
	SNG-9	31,313	5.0396	$157,805
	SNG-10	68,318	4.9986	$341,494
Total Spot		625,849	5.9809	$3,743,139

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	1,442,736		
(b) ISPR sales for month at Long term rate	1,442,736	$9.4793	$13,676,117
(c) Remaining (a) - (b)	0		
(d) ISPR sales for month at Spot rate	0	$0.0000	$0
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	1,442,736		$13,676,117
(h) Weighted Average ISPR COG		$9.4793	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(April) 2003

Long-term		Dth	Rate	
	Trans-2	19,446	5.4505	$105,990
	Trans-3	1,289,873	5.3772	$6,935,905
	SNG-7	2,317,454	5.2204	$12,098,037
	Trans-5	144,270	5.1713	$746,063
Total LT		3,771,043	5.2733	$19,885,996
Spot				
	SNG-1	45,000	5.8331	$262,490
	SNG-2	710	5.7363	$4,073
	Trans-1	1,743	5.7187	$9,968
	SNG-3	215,443	5.5388	$1,193,296
	SNG-4	344,119	5.4634	$1,880,060
	Trans-2	89,544	5.4505	$488,060
	SNG-5	264,774	5.3933	$1,428,006
	Trans-3	72,980	5.3772	$392,428
	SNG-6	171,147	5.2919	$905,693
	Trans-4	48,203	5.2498	$253,056
	SNG-7	232,393	5.2204	$1,213,184
	Trans-5	10,688	5.1715	$55,273
	Trans-6	118	5.1224	$604
	SNG-8	204,931	5.0469	$1,034,266
	SNG-9	90,190	4.9544	$446,837
	SNG-10	15,152	4.8928	$74,136
Total Spot		1,807,135	5.3352	$9,641,429

		Dth	Weighted Average Rate	Sales
(a)	ISPR Dth sold in month	4,059,016		
(b)	ISPR sales for month at Spot rate	1,807,135	$5.3352	$9,641,429
(c)	Remaining (a) - (b)	2,251,881		
(d)	ISPR sales for month at Long term rate	2,251,881	$5.2733	$11,874,937
(e)	Remaining(c) - (d)	0		
(f)	ISPR sales for month at Short term rate	0	$0.0000	$0
(g)	Total ISPR COG	4,059,016		$21,516,365
(h)	Weighted Average ISPR COG		$5.3009	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(May) 2003

Long-term		Dth	Rate	
	Trans-1	946,310	5.3700	$5,081,685
	Trans-2	150,722	5.3373	$804,449
	SNG-8	2,406,273	5.2416	$12,612,721
	SNG-9	305,350	5.2089	$1,590,538
Total LT		3,808,655	5.2747	$20,089,391
Spot				
	SNG-1	609	6.1734	$3,760
	SNG-2	756	6.0308	$4,559
	SNG-3	16,330	5.9228	$96,719
	SNG-4	10,501	5.8181	$61,096
	SNG-5	572	5.6814	$3,250
	SNG-6	31,227	5.5003	$171,758
	SNG-7	126,363	5.3749	$679,188
	SNG-8	826,056	5.2396	$4,328,203
	SNG-9	9,397	5.1629	$48,516
Total Spot		1,021,811	5.2818	$5,397,049

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	3,958,955		
(b) ISPR sales for month at Spot rate	1,021,811	$5.2818	$5,397,049
(c) Remaining (a) - (b)	2,937,144		
(d) ISPR sales for month at Long term rate	2,937,144	$5.2747	$15,492,460
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	3,958,955		$20,889,509
(h) Weighted Average ISPR COG		$5.2765	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(June) 2003

Long-term		Dth	Rate	
	Trans-1	910,290	6.2249	$5,666,464
	Trans-2	145,860	6.1909	$903,005
	SNG-1	1,322,851	6.0463	$7,998,354
	SNG-3	375,667	5.9459	$2,233,678
Total LT		2,754,668	6.0993	$16,801,501
Spot				
	SNG-1	625,086	6.0463	$3,779,457
	SNG-2	609,413	6.0272	$3,673,054
	SNG-3	53,045	5.9459	$315,400
Total Spot		1,287,544	6.0331	$7,767,912

		Dth	Weighted Average Rate	Sales
(a)	ISPR Dth sold in month	3,268,162		
(b)	ISPR sales for month at Long term rate	2,754,668	$6.0993	$16,801,501
(c)	Remaining (a) - (b)	513,494		
(d)	ISPR sales for month at Spot rate	513,494	$6.0463	$3,104,739
(e)	Remaining(c) - (d)	0		
(f)	ISPR sales for month at Short term rate	0	$0.0000	$0
(g)	Total ISPR COG	3,268,162		$19,906,240
(h)	Weighted Average ISPR COG		$6.0910	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(June) 2003

Long-term		Dth	Rate	
	Trans-1	910,290	6.2249	$5,666,464
	Trans-2	145,860	6.1909	$903,005
	SNG-1	1,322,851	6.0463	$7,998,354
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		Dth	Weighted Average Rate	Sales
(a)	ISPR Dth sold in month	3,268,162		
(b)	ISPR sales for month at Long term rate	2,754,668	$6.0993	$16,801,501
(c)	Remaining (a) - (b)	513,494		
(d)	ISPR sales for month at Spot rate	513,494	$6.0463	$3,104,739
(e)	Remaining(c) - (d)	0		
(f)	ISPR sales for month at Short term rate	0	$0.0000	$0
(g)	Total ISPR COG	3,268,162		$19,906,240
(h)	Weighted Average ISPR COG		$6.0910	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(July) 2003

Long-term		Dth	Rate	
	SNG-1	2,359,861	5.5462	$13,088,261
	Trans-1	1,089,376	5.5230	$6,016,624
	Trans-2	144,270	5.3585	$773,071
Total LT		3,593,507	5.5316	$19,877,956
Spot				
	Trans-1	31	5.5514	$172
	Trans-2	2,388	5.3577	$12,794
	SNG-2	135,591	5.3508	$725,520
	SNG-3	43,270	5.2860	$228,725
	SNG-4	305,928	4.9188	$1,504,799
Total Spot		487,208	5.0738	$2,472,010

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	3,555,113		
(b) ISPR sales for month at Long term rate	3,555,113	$5.5316	$19,665,574
(c) Remaining (a) - (b)	0		
(d) ISPR sales for month at Spot rate	0	$0.0000	$0
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	3,555,113		$19,665,574
(h) Weighted Average ISPR COG		$5.5316	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(August) 2003

Long-term		Dth	Rate	
	Trans-2	1,102,590	4.9014	$5,404,235
	SNG-4	2,370,973	4.7791	$11,331,117
	SNG-5	491,564	4.7730	$2,346,235
	SNG-6	112,836	4.7730	$538,566
	Trans-3	149,079	4.7278	$704,816
Total LT		4,227,042	4.8083	$20,324,969
Spot				
	Trans-1	7,815	5.3169	$41,552
	SNG-1	49,058	5.2660	$258,339
	SNG-2	36,299	4.9282	$178,889
	SNG-3	116,608	4.8168	$561,677
	SNG-4	3,068	4.7773	$14,657
	SNG-6	42,413	4.7488	$201,411
Total Spot		255,261	4.9225	$1,256,525

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	3,796,390		
(b) ISPR sales for month at Spot rate	255,261	$4.9225	$1,256,525
(c) Remaining (a) - (b)	3,541,129		
(d) ISPR sales for month at Long term rate	3,541,129	$4.8083	$17,026,880
(e) Remaining(c) - (d)	3,541,129		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	3,796,390		$18,283,404
(h) Weighted Average ISPR COG		$4.8160	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(September) 2003

Long-term		Dth	Rate	
	Trans-1	929,559	5.1484	$4,785,742
	SNG-1	2,321,730	5.0446	$11,712,199
	SNG-5	148,162	4.8305	$715,697
Total LT		3,399,451	5.0637	$17,213,637
Spot				
	SNG-2	112,008	4.9481	$554,227
	SNG-3	217,253	4.8402	$1,051,548
	SNG-4	219,141	4.7306	$1,036,668
	SNG-5	65,194	4.6731	$304,658
	SNG-6	300,000	4.5558	$1,366,740
Total Spot		913,596	4.7218	$4,313,841

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	3,726,770		
(b) ISPR sales for month at Long term rate	3,399,451	$5.0637	$17,213,637
(c) Remaining (a) - (b)	327,319		
(d) ISPR sales for month at Spot rate	327,319	$4.8769	$1,596,304
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	3,726,770		$18,809,941
(h) Weighted Average ISPR COG		$5.0473	

The Weighted Average Rate for Spot is based on the the amount of Dth required to fill monthly volume, 327,319 in this instance. The first and second purchases combine for 329,261 Dth. Because the accumulation of the first and second purchases meets the required amount of 327,319, the Weighted Average Rate relevant to the first two purchases is ascribed to the Spot purchase portion in this month.

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(October) 2003

Long-term		Dth	Rate	
	Trans-1	1,061,739	4.6251	$4,910,649
	Trans-2	948	4.5908	$4,352
	SNG-3	2,838,876	4.5318	$12,865,218
	SNG-4	384,639	4.5234	$1,739,876
	SNG-5	158,852	4.5221	$718,345
	Trans-3	149,865	4.4363	$664,846
Total LT		4,594,919	4.5492	$20,903,286
Spot				
	SNG-1	17,898	4.7426	$84,883
	SNG-2	128,992	4.6183	$595,724
	SNG-5	15,913	4.5099	$71,766
Total Spot		162,803	4.6214	$752,373

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	3,747,244		
(b) ISPR sales for month at Spot rate	162,803	$4.6214	$752,373
(c) Remaining (a) - (b)	3,584,441		
(d) ISPR sales for month at Long term rate	3,584,441	$4.5492	$16,306,402
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	3,747,244		$17,058,775
(h) Weighted Average ISPR COG		$4.5524	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(November) 2003

Long-term		Dth	Rate	
	SNG-1	23,699	5.0030	$118,566
	Trans-1	153,630	4.6771	$718,543
	Trans-2	1,588,872	4.6663	$7,414,153
	Trans-3	15,204	4.6482	$70,671
	SNG-2	2,526,786	4.5631	$11,529,977
	SNG-3	295,680	4.5419	$1,342,949
	SNG-4	455,730	4.5222	$2,060,902
	Trans-4	144,270	4.5069	$650,210
Total LT		5,203,871	4.5939	$23,905,972

		Dth	Weighted Average Rate	Sales
(a)	ISPR Dth sold in month	3,771,075		
(b)	ISPR sales for month at Long term rate	3,771,075	$4.5939	$17,323,876
(c)	Remaining (a) - (b)	0		
(d)	ISPR sales for month at Spot rate	0	$0.0000	$0
(e)	Remaining(c) - (d)	0		
(f)	ISPR sales for month at Short term rate	0	$0.0000	$0
(g)	Total ISPR COG	3,771,075		$17,323,876
(h)	Weighted Average ISPR COG		$4.5939	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
ISPR Incremental COG
(December) 2003

Long-term		Dth	Rate	
	SNG-8	3,131,589	4.9944	$15,640,408
	SNG-9	194,112	4.9661	$963,980
	Trans-6	2,312,621	5.0742	$11,734,701
	Trans-7	149,079	4.9124	$732,336
Total LT		5,787,401	5.0232	$29,071,425
Short-term				
	SNG-7	1,002,867	5.0228	$5,037,200
Spot				
	Trans-1	47,207	7.3089	$345,031
	Trans-2	83,005	6.8794	$571,025
	SNG-1	133,306	6.8396	$911,760
	Trans-3	43,668	6.6959	$292,397
	SNG-2	38,246	6.6191	$253,154
	SNG-3	101,296	6.3522	$643,452
	Trans-4	78,803	6.0656	$477,987
	SNG-4	53,570	5.8910	$315,581
	Trans-5	95,410	5.8098	$554,313
	SNG-5	52,062	5.7652	$300,148
	SNG-6	107,140	5.6333	$603,552
	SNG-7	21,428	5.2052	$111,537
Total Spot		855,141	6.2913	$5,379,937

	Dth	Weighted Average Rate	Sales
(a) ISPR Dth sold in month	4,024,481		
(b) ISPR sales for month at Spot rate	855,141	$6.2913	$5,379,937
(c) Remaining (a) - (b)	3,169,340		
(d) ISPR sales for month at Long term rate	3,169,340	$5.0232	$15,920,312
(e) Remaining(c) - (d)	0		
(f) ISPR sales for month at Short term rate	0	$0.0000	$0
(g) Total ISPR COG	4,024,481		$21,300,249
(h) Weighted Average ISPR COG		$5.2927	

Source: Response to Consumer Advocate 2-11.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **January 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.4674	Source: Schedule 1.
Total SCPC	$5.4583	Source: Schedule 1.
ISPR Incremental	$5.8037	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.7516
Total SCPC	$5.7425
ISPR Incremental	$6.0879

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
2	50,569	$5.3200	-$21,826	-$21,365	-$38,832
3	11,743	$5.3200	-$5,068	-$4,961	-$9,017
9	31,408	$5.3200	-$13,556	-$13,270	-$24,118
9	10,983	$5.3200	-$4,740	-$4,640	-$8,434
11	13,934	$5.5200	-$3,227	-$3,100	-$7,913
12	29,688	$5.7200	-$938	-$668	-$10,922
18	2,157	$5.3200	-$931	-$911	-$1,656
20	105,507	$5.4900	-$27,601	-$26,641	-$63,083
23	73,198	$5.3200	-$31,592	-$30,926	-$56,209
26	73,408	$5.3200	-$31,683	-$31,015	-$56,370
28	13,382	$5.3200	-$5,776	-$5,654	-$10,276
35	46,325	$5.6567	-$4,396	-$3,975	-$19,975
35	28,327	$5.6567	-$2,688	-$2,430	-$12,215
37	121,956	$5.3200	-$52,636	-$51,526	-$93,650
40	780	$5.6400	-$87	-$80	-$349
45	10,632	$5.6400	-$1,187	-$1,090	-$4,762
46	2,948	$5.3200	-$1,272	-$1,246	-$2,264
46	17,338	$5.3200	-$7,483	-$7,325	-$13,314
53	201,500	$5.4900	-$52,712	-$50,879	-$120,477
53	190,652	$5.4900	-$49,875	-$48,140	-$113,991
56	17,129	$5.3200	-$7,393	-$7,237	-$13,153
59	15,150	$5.3200	-$6,539	-$6,401	-$11,634
62	26,516	$5.3200	-$11,444	-$11,203	-$20,362
74	24,809	$5.3200	-$10,708	-$10,482	-$19,051
Total Examples			-$355,358	-$345,165	-$732,027

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **February 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.8750	Source: Schedule 1.
Total SCPC	$5.9128	Source: Schedule 1.
ISPR Incremental	$5.9662	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$6.1592
Total SCPC	$6.1970
ISPR Incremental	$6.2504

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
3	12,016	$6.1500	-$111	-$565	-$1,206
9	33,600	$6.1500	-$309	-$1,579	-$3,373
9	17,706	$6.1500	-$163	-$832	-$1,778
18	2,952	$6.1500	-$27	-$139	-$296
23	80,340	$6.1500	-$739	-$3,776	-$8,066
37	159,608	$6.1500	-$1,468	-$7,502	-$16,025
38	39,571	$6.1500	-$364	-$1,860	-$3,973
42	46,967	$6.1500	-$432	-$2,207	-$4,715
58	20,475	$6.1500	-$188	-$962	-$2,056
62	28,524	$6.1500	-$262	-$1,341	-$2,864
74	44,429	$6.1500	-$409	-$2,088	-$4,461
Total Examples			-$4,473	-$22,851	-$48,813

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **March 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$9.0332	Source: Schedule 1.
Total SCPC	$9.1133	Source: Schedule 1.
ISPR Incremental	$9.4793	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$9.3174
Total SCPC	$9.3975
ISPR Incremental	$9.7635

Examples Below cost Standard:

			Total $ Loss on Sale		
			ISPR + FIRM	Total SCPC	ISPR Incremental
Cust #	Dth	Price	COG	COG	COG
31	2	$6.1657	-$6	-$6	-$7
75	2,800	$6.6500	-$7,469	-$7,693	-$8,718
75	2,800	$7.8100	-$4,221	-$4,445	-$5,470
75	1,200	$6.6000	-$3,261	-$3,357	-$3,796
75	50,602	$6.1400	-$160,783	-$164,836	-$183,356
75	116,610	$6.1900	-$364,686	-$374,027	-$416,706
75	117,203	$7.3500	-$230,585	-$239,973	-$282,869
75	59,215	$9.1100	-$12,281	-$17,024	-$38,697
82	35	$8.3031	-$36	-$38	-$51
82	5	$6.1296	-$16	-$16	-$18
82	36	$6.4051	-$105	-$108	-$121
82	848	$6.4051	-$2,470	-$2,538	-$2,848
82	3	$6.2061	-$9	-$10	-$11
82	6	$6.3286	-$18	-$18	-$21
82	1,322	$6.4051	-$3,850	-$3,956	-$4,440
82	1	$6.1857	-$3	-$3	-$4
86	20	$6.4918	-$57	-$58	-$65
86	11	$6.7163	-$29	-$29	-$34
86	36	$6.5531	-$100	-$102	-$116
86	24	$8.3031	-$24	-$26	-$35
86	4	$6.4051	-$12	-$12	-$13
88	91	$6.5531	-$252	-$259	-$292
88	1,586	$6.5327	-$4,417	-$4,544	-$5,124
88	671	$6.2061	-$2,088	-$2,141	-$2,387
88	978	$6.4051	-$2,848	-$2,927	-$3,285
Total Examples			-$799,623	-$828,147	-$958,483

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **April 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.5139	Source: Schedule 1.
Total SCPC	$5.2934	Source: Schedule 1.
ISPR Incremental	$5.3009	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.7981
Total SCPC	$5.5776
ISPR Incremental	$5.5851

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
3	11,404	$5.5300	-$3,057	-$543	-$628
7	8,493	$5.5300	-$2,277	-$404	-$468
9	21,261	$5.5300	-$5,700	-$1,012	-$1,171
23	106,020	$5.5300	-$28,424	-$5,047	-$5,842
37	121,543	$5.5300	-$32,586	-$5,785	-$6,697
38	137,830	$5.5300	-$36,952	-$6,561	-$7,594
38	1,618	$5.5300	-$434	-$77	-$89
43	19,611	$5.5300	-$5,258	-$933	-$1,081
43	10,043	$5.5300	-$2,693	-$478	-$553
62	31,044	$5.5300	-$8,323	-$1,478	-$1,711
74	77,240	$5.5300	-$20,708	-$3,677	-$4,256
Total Examples			-$146,411	-$25,995	-$30,090

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **May 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.4693	Source: Schedule 1.
Total SCPC	$5.2752	Source: Schedule 1.
ISPR Incremental	$5.2765	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.7535
Total SCPC	$5.5594
ISPR Incremental	$5.5607

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
3	10,464	$5.5000	-$2,653	-$622	-$635
9	21,126	$5.5000	-$5,355	-$1,255	-$1,282
23	87,677	$5.5000	-$22,226	-$5,208	-$5,322
29	14,348	$5.5000	-$3,637	-$852	-$871
35	31,000	$5.5000	-$7,859	-$1,841	-$1,882
35	18,911	$5.5000	-$4,794	-$1,123	-$1,148
37	198,500	$5.5000	-$50,320	-$11,791	-$12,049
38	94,216	$5.5000	-$23,884	-$5,596	-$5,719
40	1,189	$5.5000	-$301	-$71	-$72
43	21,674	$5.5000	-$5,494	-$1,287	-$1,316
43	12,011	$5.5000	-$3,045	-$713	-$729
45	9,089	$5.5000	-$2,304	-$540	-$552
46	19,114	$5.5000	-$4,845	-$1,135	-$1,160
46	2,144	$5.5000	-$544	-$127	-$130
52	54,095	$5.5000	-$13,713	-$3,213	-$3,284
58	15,558	$5.5000	-$3,944	-$924	-$944
62	32,933	$5.5000	-$8,349	-$1,956	-$1,999
74	91,227	$5.5000	-$23,126	-$5,419	-$5,537
Total Examples			-$186,392	-$43,675	-$44,631

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **June 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$6.2802	Source: Schedule 1.
Total SCPC	$6.0827	Source: Schedule 1.
ISPR Incremental	$6.0910	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$6.5644
Total SCPC	$6.3669
ISPR Incremental	$6.3752

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
5	6,193	$5.6394	-$5,729	-$4,505	-$4,557
14	682	$5.7846	-$532	-$397	-$403
23	95,175	$6.3700	-$18,502	$295	-$495
35	30,000	$6.3700	-$5,832	$93	-$156
35	10,442	$6.3700	-$2,030	$32	-$54
37	202,115	$6.3700	-$39,291	$627	-$1,051
38	86,973	$6.3700	-$16,908	$270	-$452
40	579	$6.3700	-$113	$2	-$3
41	12,916	$6.3700	-$2,511	$40	-$67
42	1,632	$6.3700	-$317	$5	-$8
45	9,215	$6.3700	-$1,791	$29	-$48
46	1,906	$6.3700	-$371	$6	-$10
46	19,014	$6.3700	-$3,696	$59	-$99
58	14,275	$6.3700	-$2,775	$44	-$74
62	712	$6.3700	-$138	$2	-$4
74	16,124	$6.3700	-$3,135	$50	-$84
78	274	$6.3700	-$53	$1	-$1
81	1,873	$6.3700	-$364	$6	-$10
84	112	$6.3700	-$22	$0	-$1
85	5,136	$6.3700	-$998	$16	-$27
Total Examples			-$105,107	-$3,326	-$7,604

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **July 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.7189	Source: Schedule 1.
Total SCPC	$5.4770	Source: Schedule 1.
ISPR Incremental	$5.5316	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$6.0031
Total SCPC	$5.7612
ISPR Incremental	$5.8158

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
2	8,053	$5.6800	-$2,602	-$654	-$1,094
3	9,343	$5.6800	-$3,019	-$759	-$1,269
5	1,395	$5.7278	-$384	-$47	-$123
5	21,370	$5.7278	-$5,883	-$714	-$1,881
9	35,398	$5.6800	-$11,437	-$2,874	-$4,807
9	4,226	$5.6800	-$1,365	-$343	-$574
23	97,149	$5.6800	-$31,389	-$7,888	-$13,193
31	533	$5.7320	-$144	-$16	-$45
31	1,781	$5.7320	-$483	-$52	-$149
35	31,000	$5.6800	-$10,016	-$2,517	-$4,210
35	12,722	$5.6800	-$4,110	-$1,033	-$1,728
37	184,088	$5.6800	-$59,479	-$14,948	-$24,999
38	173,673	$5.6800	-$56,114	-$14,102	-$23,585
40	260	$5.6800	-$84	-$21	-$35
41	15,271	$5.6800	-$4,934	-$1,240	-$2,074
42	43,375	$5.6800	-$14,014	-$3,522	-$5,890
45	9,468	$5.6800	-$3,059	-$769	-$1,286
46	15,133	$5.6800	-$4,889	-$1,229	-$2,055
46	1,742	$5.6800	-$563	-$141	-$237
58	14,264	$5.6800	-$4,609	-$1,158	-$1,937
59	9,186	$5.6800	-$2,968	-$746	-$1,247
62	11,000	$5.6800	-$3,554	-$893	-$1,494
74	23,226	$5.6800	-$7,504	-$1,886	-$3,154
78	301	$5.6800	-$97	-$24	-$41
81	2,116	$5.6800	-$684	-$172	-$287
82	2,316	$5.7520	-$582	-$21	-$148
86	3	$5.7520	-$1	$0	$0
Total Examples			-$233,968	-$57,770	-$97,540

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **August 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$4.9988	Source: Schedule 1.
Total SCPC	$4.8142	Source: Schedule 1.
ISPR Incremental	$4.8160	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.2830
Total SCPC	$5.0984
ISPR Incremental	$5.1002

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
2	34,793	$5.0500	-$8,107	-$1,684	-$1,747
4	18,971	$5.0500	-$4,420	-$918	-$952
9	37,200	$5.0500	-$8,668	-$1,800	-$1,867
9	8,435	$5.0500	-$1,965	-$408	-$423
18	2,064	$5.0700	-$440	-$59	-$62
23	98,646	$5.0500	-$22,985	-$4,774	-$4,952
26	28,073	$5.0700	-$5,980	-$797	-$848
37	196,075	$5.1000	-$35,882	$314	-$39
38	174,981	$5.0500	-$40,771	-$8,469	-$8,784
40	86	$5.1000	-$16	$0	$0
41	11,772	$5.1000	-$2,154	$19	-$2
42	50,245	$5.6009	$15,973	$25,248	$25,158
45	10,030	$5.1000	-$1,835	$16	-$2
56	21,890	$5.0500	-$5,100	-$1,059	-$1,099
58	6,490	$5.0500	-$1,512	-$314	-$326
62	28,467	$5.1000	-$5,209	$46	-$6
74	43,004	$5.0500	-$10,020	-$2,081	-$2,159
78	111	$5.0500	-$26	-$5	-$6
Total Examples			-$139,116	$3,272	$1,883

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **September 2003**

Interuptible Transportation Rate:	$0.2842	Source: Response to CA No. 1-10.
Cost of Gas:		
ISPR + Firm	$5.1845	Source: Schedule 1.
Total SCPC	$4.9913	Source: Schedule 1.
ISPR Incremental	$5.0473	Source: Schedule 1.
Transport + COG:		
ISPR + Firm	$5.4687	
Total SCPC	$5.2755	
ISPR Incremental	$5.3315	

Examples Below cost Standard:

Cust #	Dth	Price	Total $ Loss on Sale: ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
There are no examples of a rate			$0	$0	$0
below $5.2755. However, there are			$0	$0	$0
examples of rates below $5.3315.			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
Total Examples			$0	$0	$0

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **October 2003**

Interuptible Transportation Rate:	$0.2842	Source: Response to CA No. 1-10.
Cost of Gas:		
ISPR + Firm	$4.7173	Source: Schedule 1.
Total SCPC	$4.5517	Source: Schedule 1.
ISPR Incremental	$4.5524	Source: Schedule 1.
Transport + COG:		
ISPR + Firm	$5.0015	
Total SCPC	$4.8359	
ISPR Incremental	$4.8366	

Examples Below cost Standard:

Cust #	Dth	Price	Total $ Loss on Sale ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
There are no examples of a rate below $4.8366. However, there are examples of rates below $5.0015.			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
			$0	$0	$0
Total Examples			$0	$0	$0

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **November 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$4.9625	Source: Schedule 1.
Total SCPC	$4.5939	Source: Schedule 1.
ISPR Incremental	$4.5939	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.2467
Total SCPC	$4.8781
ISPR Incremental	$4.8781

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
2	46,430	$4.8800	-$17,026	$88	$88
3	11,343	$4.8800	-$4,159	$22	$22
7	15,039	$4.8800	-$5,515	$29	$29
9	28,015	$4.8800	-$10,273	$53	$53
9	1,513	$4.8800	-$555	$3	$3
23	111,507	$4.8800	-$40,890	$212	$212
26	16,437	$4.8800	-$6,027	$31	$31
38	184,317	$4.8800	-$67,589	$350	$350
62	23,530	$4.8800	-$8,628	$45	$45
			$0	$0	$0
			$0	$0	$0
Total Examples			-$160,663	$832	$832

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.

South Carolina Pipeline Corporation
Examples of ISPR Sales Made Below Variable or Incremental Cost
(2003)

Month: **December 2003**

Interuptible Transportation Rate: $0.2842 Source: Response to CA No. 1-10.

Cost of Gas:

ISPR + Firm	$5.4328	Source: Schedule 1.
Total SCPC	$5.1645	Source: Schedule 1.
ISPR Incremental	$5.2927	Source: Schedule 1.

Transport + COG:

ISPR + Firm	$5.7170
Total SCPC	$5.4487
ISPR Incremental	$5.5769

Examples Below cost Standard:

			Total $ Loss on Sale		
Cust #	Dth	Price	ISPR + FIRM COG	Total SCPC COG	ISPR Incremental COG
3	13,513	$5.3300	-$5,230	-$1,604	-$3,336
7	16,018	$5.3300	-$6,199	-$1,901	-$3,955
9	37,200	$5.3300	-$14,396	-$4,416	-$9,185
9	7,178	$5.3300	-$2,778	-$852	-$1,772
12	23,258	$5.4000	-$7,373	-$1,133	-$4,114
12	25,052	$5.4000	-$7,941	-$1,220	-$4,432
20	111,064	$5.4200	-$32,986	-$3,188	-$17,426
23	131,637	$5.3300	-$50,944	-$15,625	-$32,501
37	177,348	$5.3300	-$68,634	-$21,051	-$43,787
38	31,235	$5.3300	-$12,088	-$3,708	-$7,712
53	201,500	$5.4200	-$59,846	-$5,783	-$31,615
53	213,893	$5.4200	-$63,526	-$6,139	-$33,560
58	17,568	$5.3300	-$6,799	-$2,085	-$4,338
62	29,274	$5.3300	-$11,329	-$3,475	-$7,228
78	142	$5.3300	-$55	-$17	-$35
Total Examples			-$350,123	-$72,196	-$204,996

Note: These are examples only and not all inclusive, nor to they contain " Indirect" ISPR Sales, i.e., ISPR sales customers that purhase directly from a LDC. Indirect customers were not provided in discovery.